Form MR-SMO (Revised July 25, 2012)

This Section for DOGM Use:	
Assigned DOGM File No .:	\$/017/0001
DOGM Lead:	
Permit Fee \$	Ck#

COMPLETE

FEB 1 0 2016

DIV. OIL GAS & MINING

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS AND MINING

1594 West North Temple Suite 1210 Box 145801

Salt Lake City, Utah 84114-5801 Telephone: (801) 538-5291 Fax: (801) 359-3940 RECEIVED

JAN 28 2016

DIV. OF OIL, GAS & MINING

NOTICE OF INTENTION TO COMMENCE SMALL MINING OPERATIONS

The information requirements of this form are based on provisions of the Mined Land Reclamation Act, Title 40-8, Utah Code Annotated 1987, and the General Rules as promulgated under the Utah Minerals Regulatory Program (R647). The rules and Act are available online at http://www.rules.utah.gov/publicat/code/r647/r647.htm and http://le.utah.gov/~code/TITLE40/40_08.htm.

Cultural Resources Survey: To fulfill its obligations under Utah Code Annotated 9-8-404, the Division needs cultural resource (archaeology) information. The amount and type of information required will depend on the mine location, the history of previous disturbance, and other factors. Please contact the Division for further information.

A permit fee of \$150 must accompany this application (Utah Code Ann. §40-8-7(1)(i)) and is due annually.

"Small Mining Operations" are operations which have a disturbed area of ten or fewer surface acres at any time in unincorporated areas, or five acres or fewer in incorporated areas.

	****	aprile.		and a supplied to the state of
GENERAL INFORMATION (Rule R647-3-	104)			A particular of the surface of the s
Name of Mine: Ticahoo Stocknila Romanal				
Ticaboo Stockpile Removal	Project	and the second s	and the second second	en in ligar e proposition i particologica per el retir (1927) en 1923 Marie
A. Name of Entity Applying for a Permit: <u>Ucol</u>	o Exploration C	orp.	New York	Becomes Anny Selection of the American
Contact (Authorized Officer): Todd Hilditch		1 (2)	0	
Mailing Address: 2390 - 1055 West Hasting	gs St. Street		e and the arrangement are to	1 11
City, State, Zip: Vancouver, B.C. Canada V	8F 2F9	A marine		Many to the
Phone Toll Free: (877) 792-6688 Fax: (604	4) 682-3860			
E-mail Address: todd@rockmgmt.ca				STATE OF STATE
Entity is a: (_X_) Corporation, () LLC () Partnership (_General, or _limited), Business Entity (not individuals) must be State of Utah, Division of Corporations (I	() Other (see registered (ar	specify type)	ogietration	A susiale alex
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply Are you currently registered to do business	OOC) If not cut	specify type) and maintain re rently register	egistration ed, contact) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply 3. Are you currently registered to do business Business Entity #: 689897045-0142	e registered (ar DOC) If not cur in the State of U	nd maintain recently register Utah? (_x)	egistration red, contact) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply Are you currently registered to do business Business Entity #: 689897045-0142 Local Business License #: Not required.	e registered (ar DOC) If not cur in the State of U	nd maintain rarrently register Utah? (x)	egistration red, contact) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply 3. Are you currently registered to do business Business Entity #: 689897045-0142	e registered (ar DOC) If not cur in the State of U	nd maintain rarrently register Utah? (x)	egistration red, contact) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply 3. Are you currently registered to do business Business Entity #: 689897045-0142 Local Business License #: Not required. Issued by: County:	c registered (are DOC) If not curl in the State of L	nd maintain register Jtah? (_x) (if required	egistration red, contact Yes ()) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply 3. Are you currently registered to do business Business Entity #: 689897045-0142 Local Business License #: Not required. Issued by: County:	or City:	nd maintain reprently register Utah? (_x) (if required	egistration red, contact Yes ()) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply Are you currently registered to do business Business Entity #: 689897045-0142 Local Business License #: Not required. Issued by: County: Registered Utah Agent (as identified with the Name: Capitol Corporate Services, Inc.	or City:	nd maintain reprently register Utah? (_x) (if required	egistration red, contact Yes ()) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply Are you currently registered to do business Business Entity #: 689897045-0142 Local Business License #: Not required. Issued by: County: Registered Utah Agent (as identified with the Name: Capitol Corporate Services, Inc. Address: East 2700 South, Suite 200	or City: Title:	nd maintain reprently register Utah? (_x) (if required	egistration red, contact Yes ()) with the
Business Entity (not individuals) must be State of Utah, Division of Corporations (I www.commerce.utah.gov to renew or apply Are you currently registered to do business Business Entity #: 689897045-0142 Local Business License #: Not required. Issued by: County: Registered Utah Agent (as identified with the Name: Capitol Corporate Services, Inc.	c registered (are DOC) If not cure in the State of L core City: or City: e Utah DOC) (iff Title:)	nd maintain rangemently register Utah? (_x) (if required individual leave	egistration red, contact Yes ()) with the

Entity's Representative(s) (if different from #2A) authorized and designated to receive notices of violation, cessation orders, and all other notices to be given to the permittee or operator by the Division. Name: Title: Address: City, State, Zip: COMPLETE _____ Fax: _____ Phone: Emergency, Weekend, or Holiday Phone: FEB 1 0 2016 E-mail Address: Name: Title: DIV. OIL GAS & MINING Address: City, State, Zip: Phone: _____ Fax: Emergency, Weekend, or Holiday Phone: E-mail Address: If Business is a Sole Proprietor (dba) or Individual: Name of Owner: _____ Title: ____ Business Address: City, State, Zip: Phone: Fax: E-mail Address: If Business is a Corporation: Name of Officers: Todd Hilditch Title: Director, President, Treasurer and Secretary Name: Nancy J. Wolverson Title: Vice President, Exploration
Thomas P. Erwin Title: Assistant Secretary Headquarters Address: Suite 2390, 1055 West Hastings Street City, State, Zip: Vancouver, BC, Canada V6E 2E9 Phone: Toll Free: 1 (877) 792-6688 Fax: (604) 682-3860 E-mail Address: todd@rockmgmt.ca If Business is a Limited Liability Company: Member Managed (__) Manager Managed (__) Name of 1st Member/Manager: ______ Title: _____ Business Address: City, State, Zip: Phone: Fax: E-mail Address: Name of 2nd Member/Manager: ______ Title: _____ Business Address: City, State, Zip: _____ Fax: _____ E-mail Address: If Business is a Partnership: Names of Partners: Business Address: City, State, Zip: Phone: _____ Fax: _____ E-mail Address: If Business is a Partnership: Names of Partners: Business Address: City, State, Zip: Phone: _____ Fax: ____ E-mail Address:

	If Business is a Partnership: Names of Partners: Not applicable.
	Business Address: City State Zin:
	City, State, Zip:
	Phone: Fax:
	E-mail Address: DIV. OIL GAS & MINING
5.	Ownership of Land Surface:
	Private (Fee) () BLM (_X_) US Forest Service () State Trust Land/School Sections () State Sovereign Lands () Other (please describe): Name Henry Mountain, Field Station Address P.O. Box 99 Hanksville, Utah, USA 84734
6.	Ownership of Minerals:
	Private (Fee) () BLM (_X_) US Forest Service () State Trust Land/School Sections () State Sovereign Lands () Other (please describe):
	Name Henry Mountain, Field Station Address P.O. Box 99, Hanksville, Utah, USA, 84734.
	BLM Claim Number(s): <u>UMC 406646, 406647, 406648, 406650, 371505 and 371507.</u>
	Utah State Lease Number(s): Not applicable.
	BLM/USFS Lease or Project File Number(s): <u>UTU 080036</u> Name of Lessee(s):
	Have the above surface and mineral owners been notified in writing? Yes _X_ No If no, why not?
8.	Does the Entity have legal right to enter and conduct mining operations on the land covered by this notice? Yes X No
does n activity comme	be advised that if State Trust Lands are involved, notification to the Division of Oil, Gas and Mining alone of satisfy the notification requirements of Mineral Leases upon State Trust Lands. Exploration or mining on State Trust Lands requires a minimum of 60 days notice to the Trust Lands Administration prior to encing any activities. Please contact the School Institutional Trust Lands Administration (SITLA) at (801) 508 for notification requirements.
II.	PROJECT LOCATION & MAP (Rule R647-3-105)
1.	Project Location & Map (legal description):
	County(ies): Garfield
	1/4, of1/4, of <u>NW</u> 1/4, Section: <u>21</u> Township: <u>35 S</u> Range: <u>11 E</u>
	1/4, of1/4, Section: <u>21</u> Township: <u>35 S</u> Range: <u>11 E</u> 1/4, of1/4, of1/4, Section:Township:Range:
	UTM East:(if known) UTM North:(If known)
	Name of Quad Map for Location: Copper Creek Benches, Utah 7.5'
2.	Is the project within an incorporated area? () Yes (_X) No
	If yes, what is the town or city?
3.	<u>Location and Operations maps</u> must be plotted at a scale to accurately identify locational landmarks and operations details. All maps must include a north arrow, scale, appropriate labels, and title box including the mine name, township, range and section.

- a. The <u>general location map</u> must be the scale of a USGS 7.5 minute series map or equivalent (1"=2000') and identify new or existing access roads.
- b. The <u>operations map</u> (1"=200' or other scale as determined necessary by the Division) must be labeled and identify:
 - i. The area to be disturbed:
 - ii. The location of any existing or proposed operations including access roads, drill holes, trenches, pits, shafts, cuts, or other planned activities; and
 - iii. Any adjacent previous disturbance for which the operator is not responsible.

(Contact the Division for a list of consultants and land surveyors for mapping assistance.)

4. The proposed (5 acre or less) disturbed area (including access/haul roads) should be marked ON THE GROUND with metal T-Posts (or with some other marker of equal effectiveness). Markers should be appropriately spaced so that the next marker in either direction is clearly visible with the naked eye.

III. **OPERATION PLAN** (Rule R647-3-106) APR 1 1 2012 1. Type of mining: Surface (X) Underground (X)DIV. OIL GAS & MINING 2. Mineral(s) to be mined: Uranium 3. Amount of material to be extracted, moved, or proposed to be moved: 59,443 cubic yards Will any water, liquid chemicals, reagents, or other solutions be used, produced or discharged as part of the mining or milling process? Yes (___) No (X) If yes, please describe (add extra pages if needed): 5. Provide a brief description of the proposed mining operation, and onsite processing facilities (add extra pages if necessary). Once an Ore Milling Agreement is obtained, the existing mineral stockpiles will be loaded into highway trucks with a Cat 980 loader (or similar equipment) and trucked off site for processing. Once removed, the site will be ripped and then reseeded. 6. () New Road(s): Length _____(ft), Width _____(ft) 7. (X) Improved Road(s): Describe improvements that need to be made to existing roads to access the site, including the Length _____ (ft) and Width _____ (ft) of new disturbances. Historic road will be re-constructed to access the stockpile. The total disturbance is 0.3 acres. See attached map. Total project surface acreage to be disturbed: 7.6 (acres) PLEASE SPECIFY EXACT ACREAGE (this will be used to determine surety bond amount - see #VI). Proposed startup date (month, year): June 2011 10. Proposed **completion**, if known (month, year):

IV. OPERATION AND RECLAMATION PRACTICES (Rule R647-3-107, 108 & 109)

The reclamation and operation obligation is to keep the area clean and safe, minimize hazards to public safety, return the land to a useful condition, and reestablish at least 70 percent of the premining vegetative ground cover or within practical limits. To accomplish this, the Permittee /

Operator will need to perform reclamation concurrently, or at the completion (within one (1) year) of mining. Please refer to The Practical Guide to Reclamation in Utah, available at:: https://fs.ogm.utah.gov/pub/MINE\$/Coal Related/RecMan/Reclamation_Manual.pdf.

- 1. Keep the mining operation in a safe, clean, and environmentally stable condition.
- 2. Permanently seal all shafts and tunnels to prevent unauthorized or accidental entry.
- 3. Plug drill holes with a five foot cement surface plug. Holes that encounter fluids are to be plugged in the subsurface to prevent aquifer contamination.
- 4. Construct berms, fences, or barriers, when needed, above highwalls and excavations.
- 5. Remove, isolate, or neutralize all toxic materials in a manner compatible with federal and state regulations.
- 6. Remove all waste or debris from stream channels.
- 7. Dispose of any trash, scrap metal, wood, machinery, and buildings.
- 8. Conduct mining activities so as to minimize erosion and control sediment.
- APPROVED

 APR 1 1 2012
- 9. Reclaim all roads that are not part of a permanent transportation system.

DIV. OIL GAS & MINING

- 10. Stockpile topsoil and suitable overburden prior to mining.
- 11. Stabilize highwalls by backfilling or rounding to 45 degrees or less, where feasible; reshape the land to near its original contour, and redistribute the topsoil and suitable overburden.
- 12. Properly prepare seedbed to a depth of six inches by pocking, ripping, discing, or harrowing. Leave the surface rough.
- 13. Reseed disturbed areas with adaptable species. (The Division recommends a mixture of species of grass, forb, and browse seed, and will provide a specific species list if requested.)
- Plant the seed with a rangeland or farm drill, or broadcast the seed. Fall is the preferred time to seed.

V. VARIANCE REQUEST (Rule R647-3-110)

Any variance must be approved writing in advance by the Division

Any planned deviations from Rules R647-3-107, Operation Practices, R647-3-108, Hole Plugging Requirements, or R647-3-109, Reclamation Practices, as summarized above (see IV. Operation and Reclamation Practices Item # 1-14), should be identified below listing applicable rule number. Give justification for the variance(s) and alternate methods or measures to be utilized to meet the intent of the rule. Written approval from the Division will be given, if the proposed alternative methods to be used are consistent with the Act.

Are variance	es being requested? Yes () No (X)	
Variance Red	quested	
Item # Justification:	Applicable Rule	

Page 6 of 7	
Alternate methods or measure to be utilized:	

Attach additional page(s) if more variances are requested.

VI. SURETY (Utah Code Ann. §40-8-7(1)[c])

A reclamation contract and surety must be provided to and approved by the Division prior to commencement of operations. No surface disturbance is authorized until the surety is posted and approved in writing. The surety may be provided in the form of a certificate of deposit, a letter of credit, a surety bond, or cash. Please contact the Division for further information about submitting the surety. All mining operations are required to furnish and maintain reclamation surety to guarantee that the land affected is reclaimed (Utah Code Ann. §40-8-7(1)[c]).

The reclamation surety amount is based on the nature, extent and duration of operations. The amounts are based on data from current large mine surety and are used as a general guide, along with actual site conditions. Reclamation surety for small mines is reviewed every three (3) or five (5) years and adjusted as necessary for inflation/deflation based upon acceptable Costs Index.

Contact the Division for the dollar amount required for a three (3) or five (5) year period for this project.

APPROVED
APR 1 1 2012
DIV. OIL GAS & MINING

VIII. SIGNATURE REQUIREMENT

CERTIFICATION

I state under penalty of perjury under the laws of the state of Utah and the United States of America that:

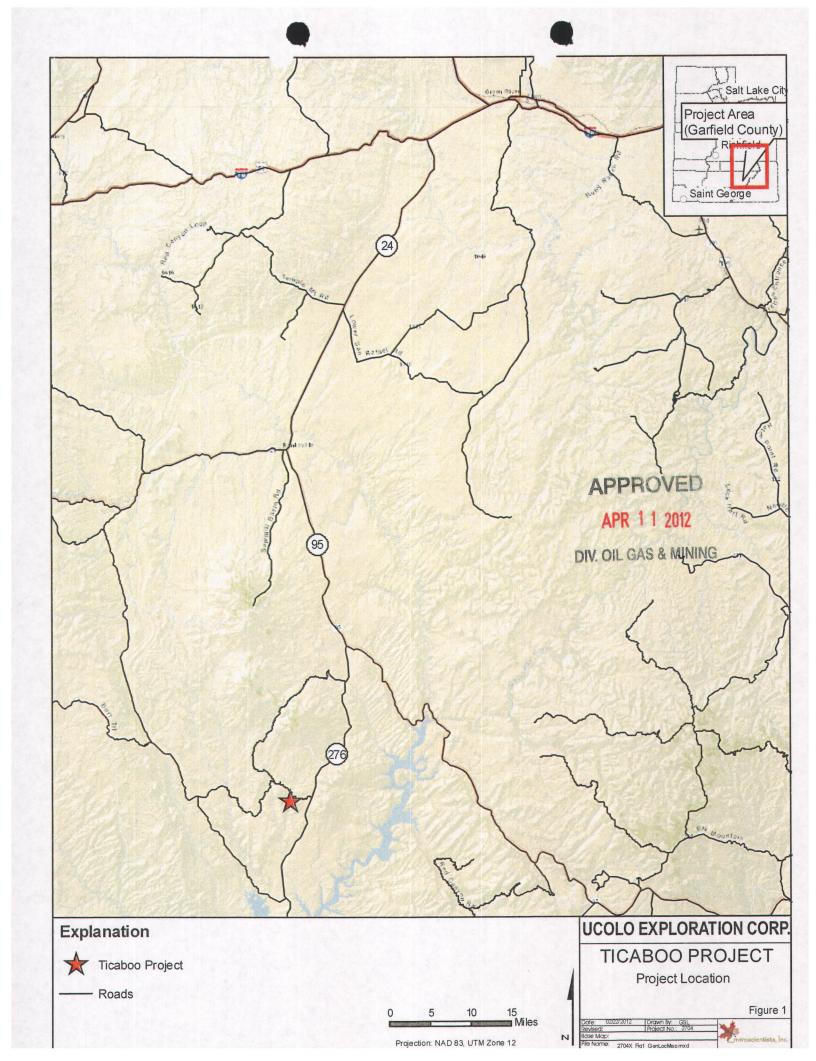
- a. I have read this form and declare the information, statements and/or documentation are true, correct and complete to the best of my knowledge and belief; AND
- b. I commit to the reclamation of the aforementioned small mining project as required by the Utah Mined Land Reclamation Act (40-8) and the rules as specified by the Board of Oil, Gas and Mining.
- c. This certification must be signed by: (1.) an executive officer if the applicant is a corporation; (2.) a partner if applicant is a partnership (general or limited); (3.) the owner if applicant is a sole proprietorship; or (4.) the member or manager if applicant is a limited liability company.

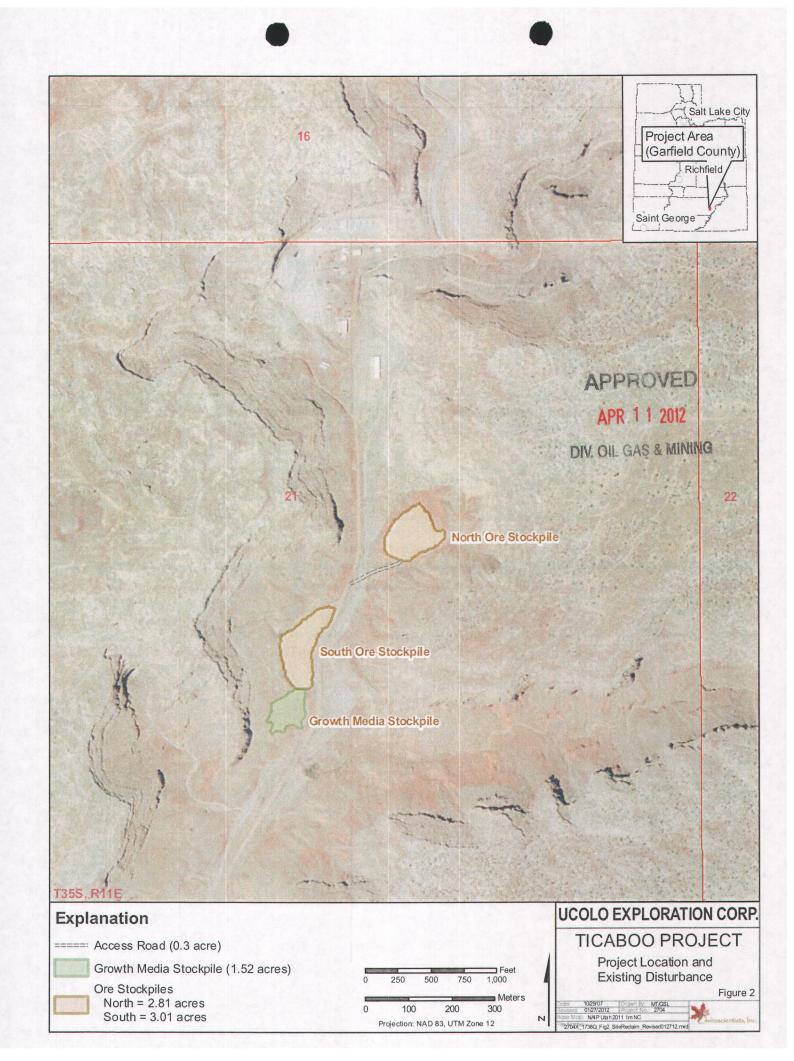
Signature:		Date: February 1, 2012
Name (typed or printed): Todd Hilditch		
Title/Position (if app	olicable): <u>Director, President, Treas</u>	urer and Secretary

O:\FORMS\Notices\mr-smo-06292011.doc

APPROVED

APR 1 1 2012





Ticaboo Stockpile Removal Project

Bond amount: \$33,000.00

Revised: February 2012

Bonding Calculations

_		Commence of the Commence of
		Costs
	IFACT	LOCIC

Subtotal Demolition and Removal	\$0.00
Subtotal Grading and Ripping	\$6,210.79
Subtotal Revegetation	\$14,509.60
Direct Costs	\$20,720.39

Difference Between Cost Estimate and Bond

Percent Difference

Indirect Costs		
Mob/Demob		Estimate
Contingency	\$7,163.60 \$1,036.00	(see Attachment) 5.0%
Engineering Redesign	\$518.00	2.5%
Main Office Expense	\$1,409.00	6.8%
Project Management Fee	\$518.00	2.5%
Subtotal Indirect Costs	\$10,644.60	16.8%
Total Cost 2010	\$31,365.00	
Number of years		5
Escalation factor		0.012
Escalation	\$1,928.00	
Reclamation Cost Escalated	\$33,293.00	
Bond Amount (rounded to nearest \$1,000) 2013 Dollars	\$33,000.00	
Posted Bond		

APPROVED
APR 1 1 2012

-\$33,000.00

Ticaboo Stockpile Removal Project 2/17/2012
Prepared by Enviroscientist, Inc.

Trepared by Enviroscientist, Inc.	
Earthwork and Mob/Demob Cost Summary	
	Cost
Grading Cost	\$636.53
Ripping Cost	\$5,574.26
Seeding Cost	\$14,509.60
Mob/Demob Cost Estimate	\$7,163.60
	The second second
	-
	100000000000000000000000000000000000000
	2 10 10 10

APPROVED

APR 1 1 2012

Cost Estimate From Grand Rental Center, Moab, Utah	Base Equipment Cost (0-60 miles)	Equipment Cost per mile (>60 miles)	Miles >60	w/ Discount	Total Travel Cost
Mod					
D8R (9-45)(2nd2011)	\$889.00	\$9.63	102	10%	\$1,684.13
627G EROPS P-P (9-44) (2ND2011) Wheel Tractor-Scraper	\$814.00		102		
Permit	0.022.002.00				\$115.00
Pilot Car					\$200.00
Demob					
D8R (9-45)(2nd2011)	\$889.00	\$9.63	102	10%	\$1,684.13
627G EROPS P-P (9-44) (2ND2011) Wheel Tractor-Scraper	\$814.00		102	10%	
Permit	1 / 14/5			1070	\$115.00
Pilot Car					\$200.00
Subtotal					\$7,163.60

Notes

Haulage rates include driver rates, loading and unloading of equipment at pick up sites. Average rates for expected permit and pilot car are included.

Three equipment dealerships were identified as follows:

¹Grand Rental Center @ 1831 S. Highway 191, Moab, Utah 84532 Henderson Leasing Company @ 3071 S Highway 191, Moab, Utah 84532 Shumway Drilling and Construction @ 2380 Old City Park, Moab, Utah 84532

¹Mob/Demob estimate provided by.

APPROVED

APR 1 1 2012

Dozer D8R (9-45)(2nd2011)	Equipment Cost/month \$18,375.00	Costs	Wage Rate		Number of Men or Eq.	Total Eq. & Lab. Costs \$295.04	Units \$/hour	Quantity 7.4	Units	Production Rate	Units ac/hour	Equip. + Labor Time/Dis.	Units	Cost \$636.53
			410.20	\$200.0V		4250101	Ç. Tiodi		40.00	5,75				
Subtotal									1,000					\$636.53

Assume: Dozer will grade road and recontour stock pile as needed to meet a slope standard of no greater than 3:1. Above quantity includes total Project Area surface disturbance foot print.

APPROVED

APR 1 1 2012

	Equipment Cost/month	Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
Dozer D8R (9-45)(2nd2011)	\$18,375.00		10%	\$70.25	\$295.04	1	\$295.04	\$/hour	na	acres	Ina	ac/hour	17.4	hour	\$5,133.67
Multi-Shank Ripper 260-359 P (9-50)(2nd2011)	\$2,485.00	\$8.90	10%	\$0.00	\$25.32	1	\$25.32	\$/hour	1468	CY	84.3	CY/hour		hour	\$440.59
Subtotal															\$5,574.26

Assume: Ripping only required for 0.3 acres of road reclamation. Ripper is attached and towed by Dozer. Time for both is limited by ripper production.



	Equipment Cost/month	Hourly Operating Costs	Equipment Overhead	Operator's Hourly Wage Rate	Hourly Cost	Number of Men or Eq.	Total Eq. & Lab. Costs	Units	Quantity	Units	Production Rate	Units	Equip. + Labor Time/Dis.	Units	Cost
627G EROPS P-P (9-44) (2ND2011) Wheel Tractor-Scraper	\$22,670.00	\$176.00	10%	\$70.25	\$405.54	1	\$405.54	\$/hour	18715	CY	615.6	CY/hour	30.4	hour	\$12,328.34
Seed Quote from Granite Seed (see attached documentation)		SAN CONTRACT				1	\$197.50	\$/acre	7.6	acre			12000		\$1,501.00
Swisher 17.5 in. ATV Seeder Spreader		\$229.00	5%	\$70.25	19 65	1	\$239.76			hours					\$380.26
ATV rental						1	\$300.00			day					\$300.00
	100														
		100									- 1 - 2				
Subtotal												NAME OF TAXABLE PARTY.			\$14,509.60

Assume: Quote for seed mix reference Table 1 in text Reseeding includes ore stockpile, footpornt of growth media stockpile and road. Assume: Buy ATV seed spreader, with 2 hours of associated labor. Assume: Rent ATV for one day determined by Moab ATV rental rate.

APPROVED

APR 1 1 2012

Ticaboo Project
02/06/12
Enviroscientists, Inc.

WORKSHEET 7 PRODUCTIVITY AND HOURS REQUIRED FOR RIPPER-EQUIPPED DOZER USE

APPROVED

APR 1 1 2012

Ripping Activity:

DIV. QIL GAS & MINING

The Multi-Shank Ripper 260-359 P (9-50) (2nd2011) would be used to rip 0.3 acres of road and 1.5 acres growth media stockpile footprint for a total ripped area of 1.8 acres

Characterization of Dozer and Ripper Use:

The Dozer proposed for use is the D8R, with an Adjustable Parallelogram Multi-Shank Ripper 260-359 P attachment.

Description of Ripping (ripping depth, cut spacing, cut length, and material to be ripped):

For the descriped dozer-ripper rig, the ripping depth will be 0.5 feet, with a cut spacing of 3'10.4", and a cut length of 8'8". Soil data is unavailable at this time, but is assumed to be hard to cut, compact material.

Productivity Calculations:

Cycle Time = 8.083333 88 0.25 0.3 min/pass ft/min min cut length [speed] fixed turn time* Passes/Hour = 60 min/hr 0.3 min/pass 0.83 145.7 passes/hr efficiency cycle time factor Volume Cut/Pass = 0.5 3.866667 8.083333 ft) ÷ 27 ft³/vd³ ft tool cut cut length penetration spacing BCY/pass 0.58 Hourly Production = 0.58 BCY/pass 145.7 passes/hr 84.3 BCY/hr Hours Required = 1468 BCY 84.3 BCY/hr 17.4 bank volume to hourly be ripped** production

Data Source(s):

Characteristics of equipment found in the Caterpillar Performance Handbook, Ed 34, 2003.

^{*} Fixed turn time depends upon dozer used. 0.25 min/turn is normal.

^{**} Remember to use the swell factor to convert from bank cubic yards to loose cubic yards when applying these data to Worksheet 5. Calculate separate dozer hauling of ripped material for each lift on that worksheet.

Project: Ticapoo Project
Date: 02/06/12
Prepared by: Enviroscientist, Inc.

WORKSHEET 11A PRODUCTIVITY OF PUSH-PULL OR SELF-LOADING SCRAPER USE

APPROVED

APR 1 1 2012

Earthmoving Activity:

The self-loading scraper would be used to move growth medium from the growth medium stockpile an approximate distance of 50 feet to the ore stockpiles after regrading has occured. The growth media will cover 24 inches over the entire area of both ore stockpiles making the total volume to be scraped 19,037 CY.

GAS & MINING

Characterization of Scraper Used (type, capacity, etc.):

A 627G Wheel Tractor-Scraper with a struck capacity of 15.7 CY, an empty weight of 82,773 lb and a rated payload of 52,800 lb.

Description of Scraper Use (origin, destination, grade, haul distance, capacity, etc.):

A 627G Wheel Tractor-Scraper would be used to move growth medium form the growth medium stockpile, 50 feet to the ore stock pile. The scraper capacity is 15.7 CY. Grade of area is five percent.

Productivity Calculations:

Cycle Time = 0.5 min 0.6 min 0.1 min load time loaded trip maneuver and return trip (push-pull is per time spread time time pair) 1.3 min (push-pull is per pair) Hourly Production = 15.7 LCY X 60 min/hr 1.3 min 0.83 capacity* cycle efficiency time** factor 615.6 LCY/hr (push-pull is per pair) Hours Required = 18715.0 LCY 615.6 LCY/hr 30.4 volume to be net hourly handled production

Data Source(s):

Equipment characteristics found in the Caterpillar Performance Handbook, Ed 34, 2003.

^{*} The average of the struck and heaped capacities; use total for two scrapers for push-pull.

Sarah Peters

From: Ryan Timoney [ryan@graniteseed.com]
Sent: Monday, February 13, 2012 2:45 PM

To: Sarah Peters

Subject: RE: Enviroscientists seed quote

\$197.50 per acre

From: Sarah Peters [mailto:speters@enviroincus.com]

Sent: Monday, February 13, 2012 3:40 PM

To: Ryan Timoney

Subject: RE: Enviroscientists seed quote

Thank you Ryan. Could I get the cost with the inclusion of Palmer penstemon (Penstemon palmeri)?

Sarah

From: Ryan Timoney [mailto:ryan@graniteseed.com]

Sent: Monday, February 13, 2012 2:39 PM

To: Sarah Peters

Subject: RE: Enviroscientists seed quote

APPROVED

APR 1 1 2012

Sarah:

DIV. O MAS & MINING

Per our conversation the Palmer's phacelia is not available. I would suggest substituting with Palmer penstemon (Penstemon palmeri) or Desert marigold (Baileya multiradiata).

The price without the phacelia is \$187.50 per acre

Thank you,

Ryan Timoney Granite Seed Company

From: Sarah Peters [mailto:speters@enviroincus.com]

Sent: Monday, February 13, 2012 3:11 PM

To: Ryan Timoney Cc: Kaitlin C. Sweet

Subject: Enviroscientists seed quote

Hi Ryan,

Here is the table of seed type and amounts we would like a quote for. Let me know if you need any other information.

	Application Rate			
Common Name	Scientific Name	(lbs PLS ¹ /acre)		
Shadscale	Atriplex confertifolia	2.0		
Four-wing saltbrush	Atriplex canescens	4.0		
Desert spinach	Atriplex polycarpa	3.0		
Quail brush	Atriplex lentiformis	3.0		
White bursage	Ambrosia dumosa	1.0		

Desert globemallow	Sphaeralcea ambigua	0.5
Palmer's phacelia	Phacelia palmeri	0.5
	Total	14.0

Thanks,

Sarah Peters

Environmental Specialist Enviroscientists, Inc.

1650 Meadow Wood Lane Reno, Nevada 89502

P:| 775.826.8822 F:| 775.826.8857

E: speters@enviroincus.com

APPROVED

APR 1 1 2012

DIV. OIL GAS & MINING

Sarah Peters

From:

Cade Petersen [ipetersen@wheelercat.com]

Sent:

Friday, February 17, 2012 12:34 PM

To:

'Sarah Peters'

Subject:

RE: Haulage Quote for D8 Dozer & 627 Scraper

Sarah.

You will possibley be looking at paying around \$80.00 to \$150.00 for a permit, it just depends on where the state will route us to haul,

the pilot car charges will possibley be around \$150.00 to \$250.00 a pilot car, again it just depends on what route and how long it would

take to the destination, and no you don't need to provide man power, are drivers can take care of everything from A to Z, we just ask

that when we arrive to pick up the machines, that they start and run.

Cade Petersen | Lindon Cat Rental Manager | Wheeler Machinery Co 239 north 1800 west Lindon, Ut 84042 | Direct: 801 796 8333 | Cell: 801 368 0549 www.jpetersen@wheelercat.com

From: Sarah Peters [mailto:speters@enviroincus.com]

Sent: Friday, February 17, 2012 1:25 PM

To: Cade Petersen

Subject: RE: Haulage Quote for D8 Dozer & 627 Scraper

Thank you Cade. The quote looks great! Could you send me all charges, including Pilot cars and Permits, as well?

Sarah Peters

Environmental Specialist Enviroscientists, Inc.

1650 Meadow Wood Lane Reno, Nevada 89502

P:| 775.826.8822 F:| 775.826.8857

E: speters@enviroincus.com

APPROVED

APR 1 1 2012

DIV. OIL GAS & MINING

From: Cade Petersen [mailto:jpetersen@wheelercat.com]

Sent: Friday, February 17, 2012 11:29 AM

To: 'speters@enviroincus.com'

Subject: Haulage Quote for D8 Dozer & 627 Scraper

Sarah,

Machine haulage from Ticaboo, Ut to Moab, Ut

Haulage for a D8 Dozer: 0-60 miles \$889.00 after 60 miles, it is \$9.63 a mile, for 162.0 miles = \$1871.26 w/10% discount \$1684.13

Haulage for a 627 scraper: 0-60 miles \$814.00 after 60 miles, it is \$9.26 a mile, for 162.0 miles = \$1758.00 w/10% discount \$1582.66 these rates are for one way haulage.

There will also be additional charges for Pilot cars and Permits to haul these machines, if your not happy with what you see, or if you have any questions concerning this please fill free to contact me at anytime.

Thanks for calling Sarah, and have a good day

Cade Petersen | Lindon Cat Rental Manager | Wheeler Machinery Co 239 north 1800 west Lindon, Ut 84042 | Direct: 801 796 8333 | Cell: 801 368 0549 www.jpetersen@wheelercat.com

